

Abstract of the Disclosure

A method for pulse modulation control of switching regulators includes positioning a series of parallel FET-type switches (high-side switches) between the input side of an inductor and the voltage supply. A second parallel series of FET-type switches (low-side switches) are used to connect the input side of the inductor to ground. A control module enables one or more of the high-side switches at the start of each switching cycle. The enabled high side switches remain enabled until the output of the buck-type switching regulator is within regulation or a current limit through the high-side switches has been exceeded. The control module then disables all high-side switches and enables an equivalent number of low-side switches. The low-side switches remain enabled until the output has fallen below regulation or current has ceased to flow from the inductor to the load of the regulator.